

Date: Thursday, 3/13/2008 1:01:24 PM
 User: Kim Johnston

Process Sheet

13

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : OH-58 AFT X-TUBE ASSEMBLY
 Job Number : 37979
 Estimate Number : 13214
 P.O. Number :
 This Issue : 3/13/2008 S.O. No. :
 Prsht Rev. : NC Part Number : D058676201TRN
 First Issue : 1/1 Type : LANDING GEAR Drawing Number : D058-676-241 U/R
 Previous Run : 37978 Drawing Revision : A2
 Material :
 Due Date : 3/28/2008 Qty: 1 Um: Each
 Written By :
 Checked & Approved By : 080313
 Comment : Est Rev: 08-03-06 new issue DD verified by:ec

Additional Product

Job Number:



Seq. #:

Machine Or Operation:

Description:

1.0

D6007106

Crosstube



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part number Description Batch

1 D6007-106 Crosstube B28799

Check OD = 2.250"; ID = 1.550"

a.m. 08-04-22 (1)

2.0

MORI SEIKI

MORI SEIKI CNC LATHE LARGE



Comment: MORI SEIKI CNC LATHE LARGE

1-Fill tube with sand & install plugs DT8534 on both ends as per Folio FA086

2-Turn first side as per Folio FA086

3-Deburr & Inspect for surface damage

a.m. 08-04-22 (1)

3.0

QC1

INSPECT ALL DIM TO DIM SHEET



Comment: INSPECT ALL DIM TO DIM SHEET

a.m. 08-04-22 (1)

4.0

MORI SEIKI

MORI SEIKI CNC LATHE LARGE



Comment: MORI SEIKI CNC LATHE LARGE

1-Turn second side as per Folio FA086

2-Deburr & Inspect for surface damage.

3-Remove sand and plugs

a.m. 08-04-22 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 3/13/2008 1:01:24 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: OH-58 AFT X-TUBE ASSEMBLY

Job Number: 37979

Part Number: D058676201TRN

Job Number:



Seq. #:

Machine Or Operation:

Description :

4-Scribe part # and batch # using vibrating stylus as per Dwg D058-676-241
Inside of Cuff(Donot engrave on outside of tube)

am 08.04.22①

5.0

QC1

INSPECT ALL DIM TO DIM SHEET



Comment: INSPECT ALL DIM TO DIM SHEET

am 08.04.22①

6.0

QC8

SECOND CHECK



Comment: SECOND CHECK

508/04/23 ④

7.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Polish entire outside surface of crosstube

u/A 800/04/23

8.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSP005 4.1 within 24 hours of machining

AWM 8-4-23

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

500/04/23 ④

10.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and stock in kanban rack

Location:

9 CROSS TUBE CELL

AWM 8-4-23

11.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/04/24

Job Completion



MF 08-04-23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order: 37979
Description: Crosstube Assembly (OH-58 High Aft)	Part Number: D058-676-241
Inspection Dwg: D058-676-241 Rev: A2	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

Inspection Sheet	Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	2.240	+0.005/-0.000	2.242	✓			
	1.870	+0.005/-0.000	1.875	✓			
	1.956	+0.005/-0.000	1.961	✓			
	2.045	+0.005/-0.000	2.049	✓			
	2.093	+0.005/-0.000	2.097	✓			
	2.140	+0.005/-0.000	2.143	✓			
	2.188	+0.005/-0.000	2.190	✓			
	2.228	+0.005/-0.000	2.228	✓			
	0.186	+0.005/-0.000	0.186	✓			
	0.500	+0.005/-0.000	0.500	✓			
	R0.063	+0.005/-0.000	R0.063	✓			
	R0.500	+0.005/-0.000	R0.500	✓			
SIDE B	103.51	+0.005/-0.000	103.510	✓			
	2.240	+0.005/-0.000	2.243	✓			
	1.870	+0.005/-0.000	1.874	✓			
	1.956	+0.005/-0.000	1.961	✓			
	2.045	+0.005/-0.000	2.049	✓			
	2.093	+0.005/-0.000	2.095	✓			
	2.140	+0.005/-0.000	2.145	✓			
	2.188	+0.005/-0.000	2.194	✓			
	2.228	+0.005/-0.000	2.228	✓			
	0.186	+0.005/-0.000	0.186	✓			
	0.500	+0.005/-0.000	0.500	✓			
	R0.063	+0.005/-0.000	R0.063	✓			
	R0.500	+0.005/-0.000	R0.500	✓			

Measured by: Q.M.	Audited by: [Signature]	Prototype Approval: N/A
Date: 08.04.22	Date: 08.04.23	Date: N/A

Rev	Date	Change	Revised by	Approved
A	05.04.27	New Issue (P/O D058-676-201)	KJ/JLM	[Signature]



DESIGN CP	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D058-676-241	REV. A SHEET 1 OF 3
DATE 00.11.17		TITLE CROSSTUBE ASS'Y (OH-58 HIGH AFT) NTS	
A	00.11.17	NEW ISSUE	

Qty	Part Number	Description
X	D058-676-241	CROSSTUBE ASSEMBLY (OH-58 HIGH AFT)
1	D6007-106	CROSSTUBE
2	D2856-400-694	ABRASION STRIP
2	D2891-1	SUPPORT
4	MS21920-20	CLAMP

GENERAL NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 2) MATERIAL: MANUFACTURED FROM D6007-106
FINISHED LENGTH = 103.51±0.020
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 4) PART IS SYMMETRIC ABOUT CENTERLINE.
- 5) RUN-OFF PART. BLEND OUT EDGE LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.
- 6) MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
- 7) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 8) SCRIBE DART PART NUMBER AND BATCH NUMBER IN THIS AREA WITH VIBRATING STYLUS.
- 9) INSTALL D2856-400-694 ABRASION STRIP WITH A 0.13 (REF) GAP ON BOTTOM SIDE OF CROSSTUBE, CENTERED OPPOSITE D2891-1 SUPPORT, PER QSI 035.
- 10) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 11) SEAL EDGES OF SUPPORTS AND ABRASION STRIP USING SIKAFLEX-241/291 SEALANT.
- 12) TORQUE CLAMPS 80 TO 100 IN-LB.

UNDER REVIEW

06.10.18 DH
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PH 07.06.26

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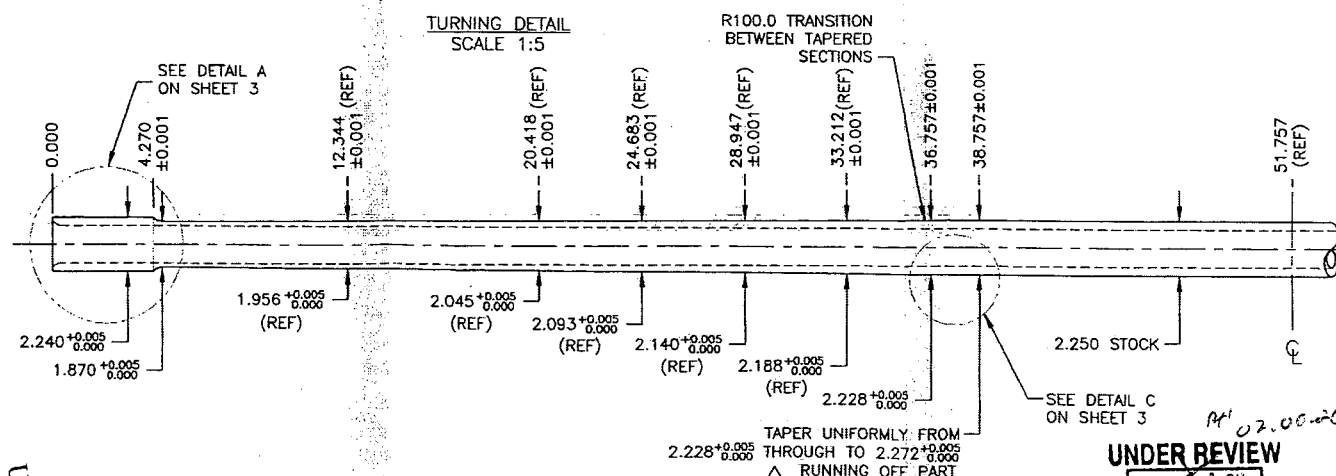
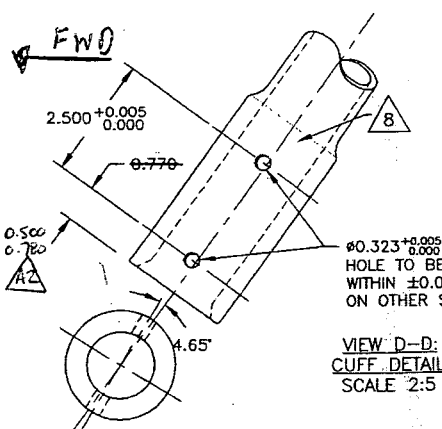
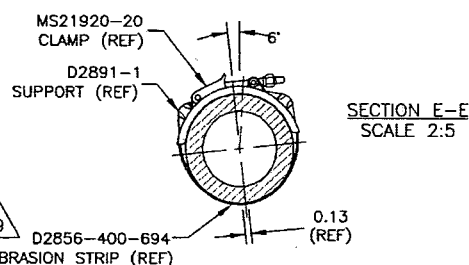
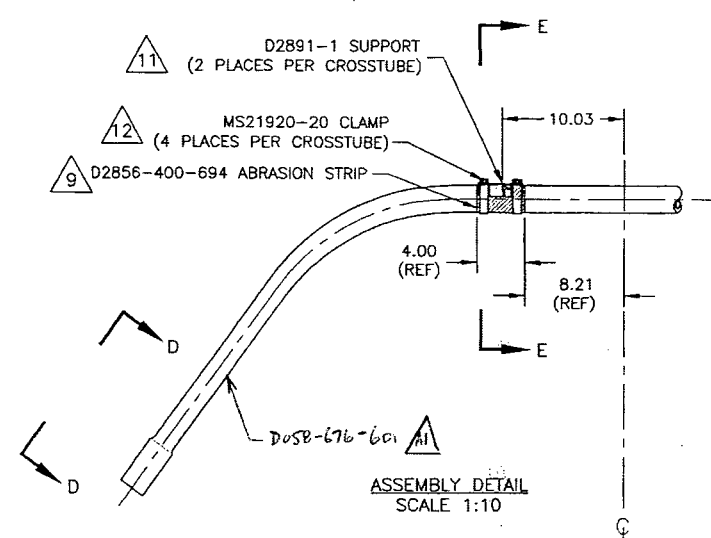
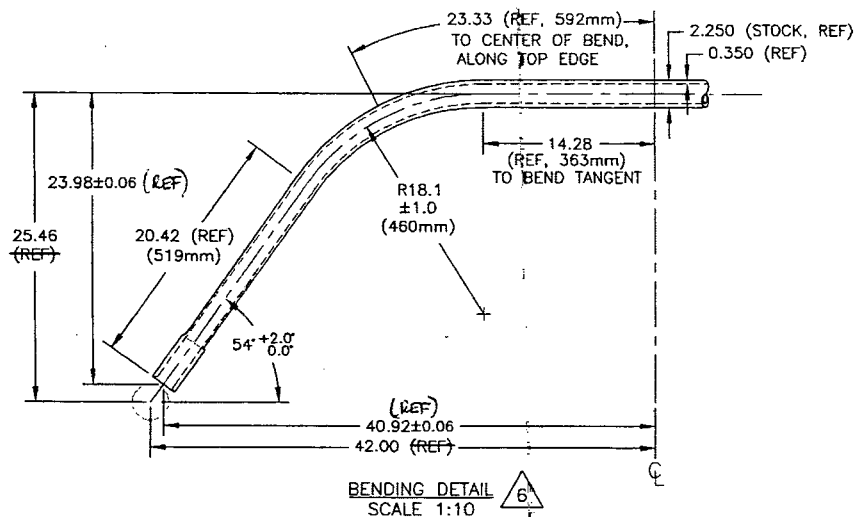
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00.11.24 #

A2	01.07.16	UPDATE DIM TO FIRST HOLE	# CP
A1	01.03.07	ADD D058-676-601 P/N	# CP

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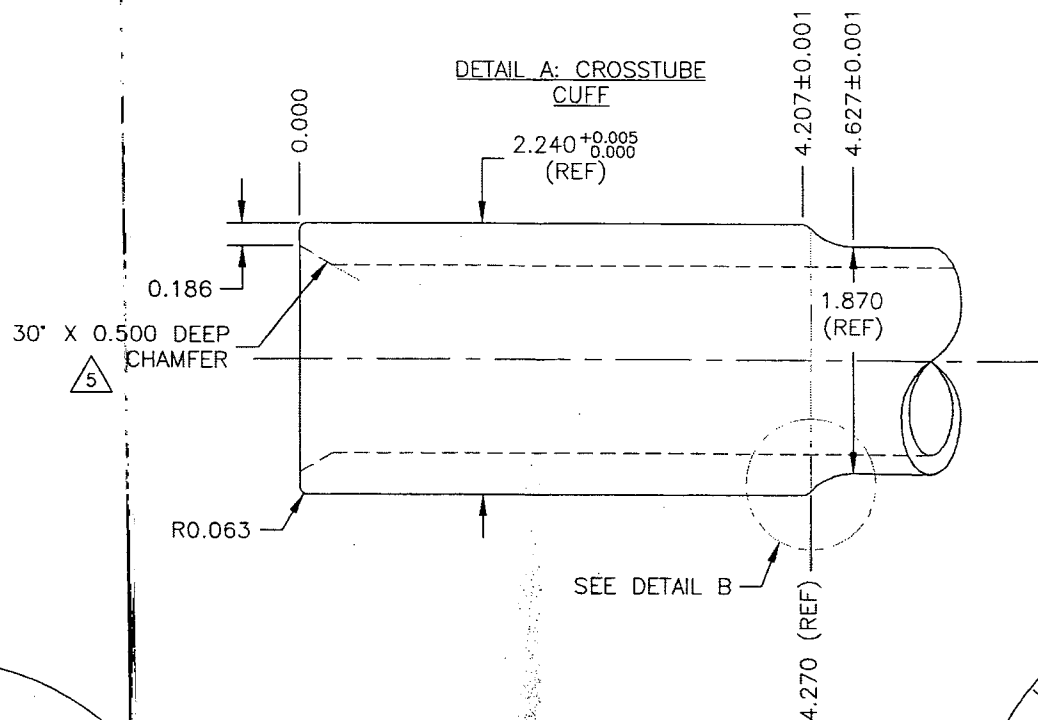
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		DATE		DRAWING NO.	SHEET 2 OF 3
		00.11.17		D058-676-241	
				TITLE	SCALE
				CROSSTUBE ASS'Y (OH-58 HIGH AFT)	1:10

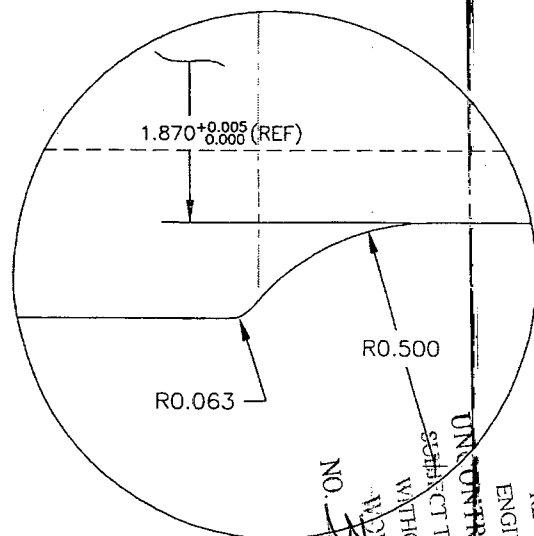
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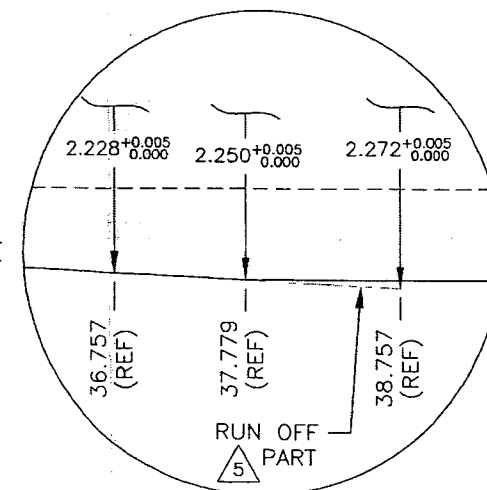
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		DATE	00.11.17	TITLE	CROSSTUBE ASS'Y (OH-58 HIGH AFT)	SCALE	1:1

